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ENTERED AT NEW YORK POST OFFICE, AS SECOND CLASS MATTER.

“THE WILD FLOWERS OF AMERICA.”

The Greatest Success of the Times.

It's only a few days since the first of the Portfolios of “Wild Flowers of America” was ready for distribution and yet its reception seems already as if the whole nation was singing its praises. From College Presidents, Botanical Professors—teachers of all kinds, Senators, Congressmen, Lawyers, Doctors, Students and the great mass of thinking people, letters of the warmest commendation are pouring in, filling the mails, and constituting at once a demonstration rarely, if ever, approached in the history of popular publications in America. From the mass of letters we publish a few, selecting mostly those of college graduates and others whose actual experience makes them judges of the work they are writing about. We are just as grateful for the letters and telegrams and postal cards from the tens of thousands of young women and young men, whose admiration seems boundless; and may at another time show appreciation of them.

A National Work Receives a National Testimonial.

J. HAVENS RICHARDS, President Georgetown College, West Washington, D. C.:

“The beauty and artistic excellence of the colored drawings are worthy of high praise, * * * and I am confident that by its attraction many young people will be led to undertake and pursue with the greatest pleasure a study which they might otherwise find distasteful.”

J. V. COCKRILL, Congressman, Thirteenth District, Texas, Graduate of Chapel Hill College, Ex-District Judge:

“Is both beautiful and interesting.”

A. C. HARMER, Congressman, Philadelphia, representing Fifth District, Pennsylvania:

“I have carefully examined Mr. Buck's works of the ‘Wild Flowers of America,’ and think them exquisite.”

DAN WAUGH, Congressman Ninth District, Indiana, Ex-Circuit Judge, member Seventh Agricultural Committee, House of Representatives:

“I regard it an excellent work of art, which would be an adornment to any library.”

CHAMP CLARK, Congressman Ninth District, Missouri, Graduate Bethany College, W. Va., Ex-President Marshall College, W. Va.

GEO. W. SMITH, Congressman Twentieth District, Illinois, Graduate McKendree College, Lebanon, Ill.:

“A valuable, beautiful and instructive book, and should be in every school-room in the land.”

E. H. FUNSTON, Congressman, Second District, Kansas, Graduate Marietta College, Ohio, Ex-President State Senate:

“In my judgment, will be a most valuable acquisition to the libraries of those who love the beautiful in nature.”

CHAS. H. MORGAN, Congressman, Fifteenth District, Missouri:

“Deserves and will receive the encomiums from all lovers of the beautiful, and its correctness and completeness make it one of the most valuable contributions to American literature.”



— 65 —
GREEK VALERIAN.
POLEMONIUM REPTANS.
JUNE.



— 66 —
OSWEGO TEA.
MONARDA DIDYMA.
JUNE—JULY.

PLATE 65.

GREEK VALERIAN. POLEMONIUM REPTANS. (POLEMONIUM FAMILY.)

Perennial from a knotty rootstock, almost glabrous; stem erect or reclining, branching; leaves alternate, odd pinnate, long petioled; leaflets thin, ovate lanceolate, mucronate; flowers in almost naked corymbs; corolla short campanulate, five lobed; stamens borne on the tube of the corolla; pod much shorter than the enlarged fruiting calyx.



ESIDES the handsome, many-colored phloxes and showy gillias, there is another genus of beautiful plants in the polemonium family, the genus from which the family takes its name. The Greek valerian, or Jacob's Ladder, of Europe, polemonium caeruleum, is represented in this country by two or three closely related species. Of these the creeping Greek valerian is the best known and most common. It is a frequent plant in low, rich woods from the Middle States to Missouri and southward. It flowers in May and June. It is a pretty plant, with weak, spreading stems, compound leaves and loose clusters of showy, clear blue, bell-shaped flowers. If the name "bluebells" had not been appropriated to other plants, it would be a fitting title for this.

There are two other kinds of Greek valerian in North America. One grows in the far northward and Northeastern States. The other is a native of the Rocky Mountains. Both have long been considered identical with the European polemonium caeruleum, but have been described as distinct species by recent authors.

The name polemonium is from a Greek word for war. Doubtless this is the reason that it has come to signify "rupture" in the language of flowers. It is a pity that so fine a plant should come to have so harsh a meaning.

PLATE 66.

OSWEGO-TEA. MONARDA DIDYMA. (MINT FAMILY.)

Stem erect, branched, four-angled, smooth or slightly pubescent; leaves opposite, petioled, ovate, acuminate, sharply serrate; heads large, terminating the branches; involucre bracts reddish; flowers large; calyx five-toothed, tube curved; corolla bright scarlet, two-lipped, upper lip erect, lower pendant.



HE mint family does not contain many brilliant flowers. The mints as a rule devote their energies to the production of delightful odors, and seldom care to adorn themselves with gay colors. There are notable exceptions in grace of attire,—the weirdly beautiful synandra, the showy false dragon-head, and some of the blue and white skull-caps. But none of these is fragrant. The Oswego-tea is one of the few of the mints of Eastern North America in which perfume and conspicuous beauty are combined. This may be said of nearly all the species of monarda. Most of them have large, handsome flowers and a warm aromatic odor.

The Oswego-tea is a singularly pretty plant. The deep green of the leaves is an excellent relief for the vivid cardinal-red of the flowers. These are deeply and widely two-lipped. It is a plant of cool, shady places along streams, usually growing in patches, making a charming stretch of warm bright color. The aromatic leaves are, in some localities, administered in the form of "tea" as a remedy for divers maladies. Monarda didyma is native in the Appalachian region, as far south as Georgia, and strays northward.



— 67 —
SPIDERWORT.
TRADESCANTIA VIRGINICA.
JUNE—JULY.



— 68 —
SILVER WEED.
POTENTILLA ANSERINA.
JUNE.

PLATE 67.

SPIDERWORT. *TRADESCANTIA VIRGINICA*. (SPIDERWORT FAMILY.)

Perennial; root a cluster of thickened fibres; stem erect, smooth or hairy, jointed, joints sheathed by the clasping bases of the long, linear or lanceolate, grass-like leaves; flowers in an umbel bracted by the upper leaves; outer three perianth segments green, inner three purple.



ABOUT flowers that open only to wither there is a tender charm. These are the dragon flies of the plant world, ephemeral beauties, expanding at

"The breezy call of incense-breathing morn,"

fading like vapor in the light of the mid-day sun. Such are the delicate blossoms of the spider-flower. Brave and hardy they look in their dress of rich purple, till the hot sun blasts them. Then they melt away like wax. The withered, mucilaginous petals can be drawn out into fine threads like those of a spider's web, hence the popular name.

Tradescantia Virginica is a beautiful plant. The flowers with their golden stamens and their petals of a fine shade of blue or of purple are as pretty as they are curious. The spiderwort does not extend north of the Middle States in the East. In the West, it grows in Minnesota, straying into Canada, and westward to the Rocky Mountains. Southward it ranges to Florida and Texas. The flowers appear in May and June. Another pretty little spiderwort is *tradescantia rosea*, with pink-purple flowers, a native of the Southern States. Some of the tropical species are exceedingly handsome, with flowers much larger than ours.

PLATE 68.

SILVER-WEED. *POTENTILLA ANSERINA*. (ROSE FAMILY.)

Acaulescent; roots fibrous, thickened; rootstock short, sending out long stolons rooting at the joints; leaves pinnate; leaflets numerous, the lower very small and small ones interspersed among the upper, oblong, coarsely toothed, green above, whitened and sericeous beneath; flowers solitary on long peduncles, yellow.

"Full many a gem of purest ray serene,
The dark, unfathom'd caves of ocean bear:
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air."—GRAY.



MANY of our prettiest wild flowers might as well blossom and die in inaccessible deserts, so little notice do they win. We seek out the shy forest flowers and admire them, passing, unheeding, many a blossom quite as fair, because it dwells by the roadside—too near for observation!

Thus the silver-weed, a really handsome plant, is noted but by few. Yet its yellow cups and leaves silver-lined beneath make it worthy of praise by all who can esteem true grace. It inhabits swamps and low banks of streams—a northern plant, not extending south of New Jersey. Like several others of our species of *potentilla*, it is common to this country and to Europe. Indeed, the cinquefoils seem to be a peculiarly cosmopolitan tribe.

The silvery appearance of the lower surface of the leaf is due to long silky hairs. The usefulness of such hairs, in the bud, is evident, for there they are a mantle against cold; of what value they are to the grown plant is not yet discovered.



— 69 —
 WOOD-DAFFODIL, BELLWORT.
UVULARIA PERFOLIATA.
 MAY.



— 70 —
 PINK AZALEA.
AZALEA (RHODODENDRON) NUDIFLORA.
 APRIL—MAY.

PLATE 69.

WOOD-DAFFODIL, BELLWORT. *UVULARIA PERFOLIATA*. (LILY FAMILY.)

Stem smooth, simple, rising from a short rootstock bearing a cluster of thickened, fibrous roots; leaves alternate, ovate, acute, glaucous beneath, the lower perfoliate, the uppermost cordate; flower large, campanulate; perianth segments six, lanceolate, acute, pale yellow; fruit consisting of a three-angled pod.

"When our wide woods and mighty lawns
Bloom to the April skies"—



R, perchance, somewhat later, in the North, we find the bellwort nodding its pale yellow flowers in rocky woods and copses. When the flowers blow, the leaves that clothe the stem are only half unrolled. The whole plant is whitish with a bloom like that of cabbage leaves. The leaves seem to be punctured by the stem, which appears as if passing through them. In reality the leaves are merely heartshaped, with the two lobes of the "heart" grown together, so as to surround the stem. Here we come upon an example of the defences so common in nature. The flower is intruded upon by crawling insects which pay no score for the pollen they eat—they do nothing for fertilization. With a perfoliate leaf to fence them out, these marauders are discouraged. This protection, slight as it is, tells to the advantage of the plant in its unceasing battle for life and offspring. The wood-daffodil is a common plant of North America, extending westward almost to the Rockies.

PLATE 70.

PINK AZALEA. *AZALEA (RHODODENDRON) NUDIFLORA*. (HEATH FAMILY.)

Low shrub, much branched, straggling; leaves fascicled at the ends of the twigs, ovate lanceolate, acute, mucronate, ciliate and hairy on the mid-rib; flowers in umbel-like clusters from large scaly buds, appearing before the leaves, glandular, with a long tube and a spreading limb, pale pink.

"Azaleas flush the island floors,
And the tints of heaven reply."—EMERSON.



FEW of our native shrubs are so admired and prized as the azaleas. None are better entitled to the honor. The beautiful, and often deliciously fragrant, flowers are of every conceivable dye. Those of the superb tree-like azalea, *azalea arborescens*, of the Alleghany mountains, and the swamp honeysuckle, *azalea viscosa*, of marshes along the Atlantic coast, are pure white or faintly tinged with pink. The flame-colored azalea, *azalea calendulacea*, also an Alleghany mountain species, has a corolla ranging in color from bright orange and the hue of living embers, to a brilliant scarlet.

The pink azalea is the earliest flowering of them all. The flowers appear in clusters at the ends of the twigs, in April and May. They come with the leaves, or herald their coming, as do those of the flame-colored azalea. The color of the corolla varies from a light shade of pink to the deep rose of oleander blossoms. An azalea bush, covered with these large flowers before the leaves are unfolded, is a conspicuous mark for the eye of man and insect-minister in the low thickets where it usually grows. The pink azalea is common in the eastern part of the continent.



— 71 —
 RATTLESNAKE ROOT.
PRENANTHES ALBA.
 AUGUST.



— 72 —
 SANDPAPER STARWORT.
ASTER LINARIIFOLIUS.
 SEPTEMBER.

PLATE 71.

RATTLESNAKE-ROOT. PRENANTHES ALBA. (SUNFLOWER FAMILY.)

Perennial, smooth; stem erect, tall, often reddish; leaves alternate, the lower on long petioles, lobed and irregularly toothed, the upper broadly triangular-ovate, uppermost lanceolate; flowers in panicles, drooping heads; involucre bell-shaped, of a single row of bracts; flowers all ligulate,

"The last pale flowers that look,
From out their sunny nook,
At the sky."—BRYANT.



NE of these is the rattlesnake-root. The tall wand-like stem with its cluster of drooping, bell-shaped heads is one of the most striking objects of the autumn woods. While the last golden-rods are lingering in fence-corners and along brooks, loath to relinquish their golden pomp; while asters and gentians are donning their bravest livery in honor of departing summer, the prenanthes shoots up on the wooded hillside, only to hang its head in sorrow at the passing of the year.

The flowers are of an indistinct yellow-white, insignificant enough individually. The seeds are tufted with brown-purple hairs. When these are ripe, the heads open and the seeds are carried far and wide by the wind. The rattlesnake-root belongs to that part of the huge sunflower family, notable for having all the flowers open and strap-shaped. It is in this respect unlike the asters, sunflowers, coreopsis and others, for these have a circle of strap-shaped rays surrounding a disk of smaller, tubular flowers.

As the popular name signifies, prenanthes alba is one of the many plants whose roots are supposed to be a cure for snake-bites. It is a common plant northward, but becomes scarce and confined to the mountains in the South.

PLATE 72.

SAND PAPER STARWORT. ASTER LINARIIFOLIUS. (SUNFLOWER FAMILY.)

Perennial; roots fibrous; stems clustered, woody at base, erect, slender; leaves alternate, sessile, linear, acute, one nerved, rough on the margins, the upper much reduced; heads large, terminating the branches; involucre much imbricated, consisting of numerous, narrow, green-tipped bracts; rays violet.

"On the hills the golden-rod, and the aster in the wood,
And the yellow sunflower by the brook, in autumn beauty stood."



BRYANT is here rather at fault in his reading of

"The calendar,
Faithful through a thousand years,
Of the painted race of flowers,
Exact to days, exact to hours";

because the sunflowers are on the wane when the golden-rods come, and most of the asters are later in flowering than the golden-rods. Nevertheless, there are some early asters which may be considered as flowering with these. Aster linariifolius, for example, begins to blow ere the late sunflowers have passed away, and while the golden-rods are in their glory. It is a pretty plant, with clustered, erect stems, short, narrow, rigid leaves, and numerous, rather large, flaunting heads. The rays are of a beautiful violet color. It is a sylvan aster, preferring dry, wooded hillsides. In such secluded places it is common in eastern North America. It commences to flower early in September in the South, while northward it blossoms almost up to frost. The rough margins of the leaves have earned for it the name of "sand-paper starwort," in some localities. As a general thing, however, the different kinds of aster have not received popular names.

PLATE 73.

SHRUBBY CINQUEFOIL. *POTENTILLA FRUTICOSA*. (ROSE FAMILY.)

Stem shrubby, with a shreddy bark, much branched; leaves long-petioled, pinnately compound, leaflets mostly five, occasionally seven, lanceolate, white and sericeous beneath, veiny; flowers in cymes, or solitary at the ends of the branches; petals five, orbicular, bright yellow; stamens numerous.

'The herbs and simples of the wood,
Rue, cinquefoil, gill, vervain and agrimony,
Blue-vetch and trillium, hawkweed, sassafras,
Milkweed and murky brakes, quaint pipes and sundew.'—EMERSON.



HUS are enumerated our characteristic wild flowers—the cinquefoil in a place of honor. The list is given us in the poem entitled "Blight," wherein the Concord sage—the heart of a Greek philosopher throbbing in his breast—sharply rebukes the students who

"Love not the flower they pluck, and know it not,
And all their botany is Latin names."

The cinquefoil, with other members of the potentilla race, is one of the wild flowers which, in the North, oftenest renews acquaintance with the observer.

The shrubby cinquefoil makes its home in swamps in Canada and the Northern States, extending westward as far as Minnesota. It is also indigenous to Europe. It is a very beautiful plant. The dark green leaves are silky white beneath. The golden flowers appear in profusion throughout the summer.

To those learned in the language of the flowers the blossoms of the cinquefoil signify "maternal affection." If it were "filial love," the significance would be clearer, for most species of potentilla hug close to Mother Earth. Nearly all the cinquefoils have bright yellow flowers, but there is an odd kind in Arizona, with dark purple petals.

PLATE 74.

WAKE-ROBIN, BIRTHROOT. *TRILLIUM ERECTUM*. (LILY FAMILY.)

Perennial, smooth; rootstock thick, oblique; stem simple, erect, terete, bearing a whorl of three leaves and a solitary flower; leaves rhombic-ovate, acuminate, veiny, veins reticulated, flower large, on a curved pedicel; sepals, three, green; petals, three, ovate-lanceolate, acute, colored.

"Little brings the May breeze
Beside pure scent of flowers,
While all things wax and nothing wanes
In lengthening daylight hours."—BRYANT.



AMONG the countless fair flowers that paint the ground with rainbow hues in the glorious month of awakening, none are more beautiful than the trilliums. Stanch natives are the trilliums. Two or three, 'tis true, are natives of Western Asia; but these are little known, and the familiar species are all ours.

The wake-robin, or birthroot, is one of the handsomest. The flowers are larger than those of the painted trillium. The color of the petals is usually a dull red. Sometimes we find them white, splashed with red at the base, so as to give a crimson heart to the flower. The birthroot is one of the flowers that scents the May breeze, but not with a delightful fragrance. Its odor is distinctly unpleasant—that is, to human nostrils; what insects think of it is another matter. The birthroot is one of the trilliums that have the flower borne on a stalk, above the leaves. This stalk is usually more or less bent, making the blossom droop gracefully. The lesson conveyed by the trillium to those who read the flower language is that of "shy beauty." *Trillium erectum* grows southward to Tennessee, and westward to Missouri, but its stronghold is in Canada and the Northeastern States.



— 73 —
 SHRUBBY CINQUEFOIL.
POTENTILLA FRUTICOSA.
 JUNE.



— 74 —
 WAKE-ROBIN, BIRTHROOT.
TRILLIUM ERECTUM.
 MAY.

PLATE 75.

GROUND CHERRY. *PHYSALIS VIRGINIANA*. (NIGHTSHADE FAMILY.)

Hairy perennial; stem erect when young, soon prostrate, branching; leaves alternate or almost opposite, in which case one is smaller, long petioled, ovate, obtuse or acutish, rounded or truncate and unequal at base, coarsely toothed and sinuate; flowers on axillary pedicels; corolla funnel-shaped; anthers yellow.



THE sandy fields of midsummer bring forth a coarse little weed, the ground cherry, insignificant and often unobserved. At first sight we think it is not in bloom. But if we raise one of the branches and look underneath the leaves, we will find the odd little drooping flowers, half funnel-form, half bell-shaped. The color of the blossom is pale yellow, with a brown-purple centre, and more or less veined with the same color. They suggest at once the henbane's lurid flowers. The ground cherry, or physalis, is a near relative of the henbane. It is generally reputed to be more or less poisonous, but it is certainly not as dangerous as the hyoscyamus. Indeed, one species, *Physalis Alkekengi*, has a berry which is sometimes eaten under the name of strawberry-tomato. It is the fruit of the physalis that earns it the name by which it is popularly known. The fruit is a round yellow or scarlet berry, not unlike a cherry in appearance. It is enveloped by the greatly enlarged, papery calyx, hence the name *Physalis*, which means *a bladder*.

There are many species of physalis here. One is a common weed of gardens and corn-fields, *Physalis pubescens*, a small flowered species.

PLATE 76.

BLUE-EYED GRASS. *SISYRINCHIUM BERMUDIANUM*. (IRIS FAMILY.)

Whole plant smooth; roots fibrous; stems numerous, tufted, six to eighteen inches high, flattened, usually winged; leaves long, linear; flowers few in an umbel, subtended by a spathe of two leaves; perianth segments six, aristate; stamens six, united; stigmas three.



GRACEFUL little plant with six-parted azure flowers that opens in meadows or on hillsides in late spring and early summer. It is often unseen, for it grows among the grass, loving to hide itself. If we search for it at noon-time when the broad sunlight beats upon the fields, we will not find the star-like blossoms. "All things in this world," writes Thoreau, "must be seen with the dew on them, must be seen with youthful, early-opened, hopeful eyes." That is the charm of the modest blue-eyed grass. It opens its eyes in the fresh morning, but shuts them to the midday glare. It is while the trees still cast long westward shadows on the wet grass that we may expect to catch it awake.

It is not strange that the sisyrinchium is called a grass. The leaves, even the flat, winged stems, are grass-like. When one sees it with the blossoms closed, its true affinity would not be guessed at. But the blue-eyed grass is really a cousin of the proud iris. The large, irregular, showy flowers of the flags seem to have little in common with the six-parted, regular blossom of the other, yet their plan is one and the same.



— 75 —
GROUND CHERRY.
PHYSALIS VIRGINIANA.
JULY.



— 76 —
BLUE-EYED GRASS.
SISYRINCHIUM BERMUDIANUM.
JUNE.

PLATE 77.

EGLANTINE, SWEET-BRIER. ROSA RUBIGINOSA. (ROSE FAMILY.)

Much branched shrub; stems armed with stout, curved prickles, stipules prominent; leaves pinnate, leaflets usually five in number, ovate, acute, sharply serrate, extremely glandular beneath; calyx lobes long, spreading, pinnatifid; petals five, pale pink; hip ovoid, bright scarlet.

"In the warm hedge grew lush eglantine."—SHELLEY.

"The honey wine,
Of the moon unfolded eglantine
Which fairies catch in hyacinth bowls."—SHELLEY.



English poets only Wordsworth knew the flowers as Shelley did and described them as lovingly, albeit Wordsworth is less fanciful than Shelley, and his pictures are less "impressionistic." Wordsworth, too, loved best the shy grace of the wild flowers, while Shelley tuned his lyre to the praise of the wards of the gardener.

Perhaps no flower combines so much rustic wildness of beauty with a fondness for dwelling near human haunts as does the eglantine. One of the loveliest of roses, it has come to us from Europe and has long made itself at home in the new world.

Hawthorne, in "The Scarlet Letter," gives us a beautiful picture of the sweet brier bush that grew at the door of the gloomy New England jail, the one bright object that met the eyes of the unhappy prisoner as she entered.

The exquisite beauty of the eglantine with its dainty pink flowers and graceful leafage, is joined to a delightful, penetrating fragrance. This comes from the essential oil contained in the tiny glands on the under-surface of the leaf.

PLATE 78.

GOLDEN RAGWORT. SENECIO AUREUS. (SUNFLOWER FAMILY.)

Whole plant glabrous, at least when mature; stem erect, usually stout, furrowed; root leaves on long petioles, large, short oblong or orbicular, cordate, crenate; stem leaves lyrate, uppermost sessile, clasping, deeply toothed; heads in a terminal, corymbose panicle, bright yellow, rays usually ten or twelve.



THE sunflower family is the largest among flowering plants. It includes an enormous number of species, and presents a rich variety of forms. The iron-weed with its tubular purple flowers, the golden-rods and asters, the sunflowers, cone-flowers and coreopsis with their showy rays, the yarrow and white-weed, the rag-weed and the clot-bur with their insignificant greenish flowers, the worm-woods, the thistles, the dandelion and chicory, the wild lettuce and the sow-thistle—all belong to it. All these many forms have in common one unfailing characteristic, the flowers are borne in heads.

The ragworts or senecio are a large genus, both in the old world and in the new. In North America there are numerous species, especially in the Rocky Mountains and in Mexico. In the East, the golden ragwort, senecio aureus, is the best known kind. It is a dweller in moist meadows and bogs in the North, but it prefers the mountain meadows of the South. It is a pretty and attractive plant, the fresh sappy green of the leaves in elegant contrast with the brilliant yellow of the heads of its flowers. When the blossoms have faded, the seeds are ripened. These are plumed with soft, white hair. Hence the name senecio, from *senex*, an old man.



— 77 —

EGLANTINE, SWEET BRIER.

ROSA RUBIGINOSA.

JUNE.



— 78 —

GOLDEN RAGWORT.

SENECIO AUREUS.

MAY—JUNE.

PLATE 79.

NIGHT FLOWERING CATCH-FLY. *SILENE NOCTIFLORA*. (PINK FAMILY.)

Annual; whole plant viscid pubescent; stem erect, usually two or three feet high, much branched; leaves opposite, sessile or on short margined petioles, ovate, spatulate, or lanceolate, acute, veiny; flowers in elongated, bracted cymes; calyx rather large, teeth short; petals five, white, two-toothed.



S*ILENE noctiflora* is one of those odd plants that open their flowers when most others have gone to sleep. When the wood-sorrel has folded its leaves together and the wild senna hugs itself and shivers in the night wind, then the nocturnal catch-fly opens its fragrant, white or pink blossoms by the roadside. They know not the brightness of our sunlight, these pale blossoms. They catch only the pale lustre of the stars, the suns of other systems. The sturdy bee, the dainty butterfly, visit them not. Their guests are the dusky night-moths. It is a coarse unattractive plant as we see it by daylight, covered with sticky hairs, like many of its congeners. But it makes quite another impression on us, as we come upon it at an evening hour.

It is a plant of doubtful origin, the night-flowering catch-fly. Certain it is that it has come to us from the old world. Alphonse De Candolle, the great authority on geographical botany, attributes it to Siberia, but it has long been naturalized in Western Europe, whence it has been introduced into North America. It is pretty well naturalized here, flowering in summer. The name catch-fly has been given to these plants because of the sticky hairs wherewith they are often covered.

PLATE 80.

TICK-TREFOIL. *MEIBOMIA (DESMODIUM) CANADENSIS*. (PEA-FAMILY.)

Stem erect with branches contracted, hairy; stipules small, early deciduous; leaves trifoliate, ovate or oblong-lanceolate, acute, veiny, green above, paler and hairy beneath; flowers comparatively large, in terminal, panicle racemes; corolla violet purple, butterfly-shaped; fruit a loment or jointed pod, joints few, rounded.



IT is an admirable contrivance for spreading seeds far and wide—the development of prickles on the fruit so that they may catch in the hair of animals. The maple attains the same desired end of reproduction, by having its fruit winged so that the wind will carry it. The seeds of the thistle and of the milk-weed bear tufts of delicate hairs so as to be wafted on the lightest breeze. In the case of berries and other edible fruits, the seeds are surrounded with a soft pulp, so that birds will devour them. The pods of the witch-hazel discharge the seeds as if from a pistol, to a surprising distance. Some western grasses have long awns or bristles which penetrate the fleece and even the flesh of sheep. The burdock, the beggars'-lice and the tick-trefoil make use of hooked prickles to fasten themselves to animals. The end in view is always the same—to scatter widely the seeds so that the young seedlings will not crowd each other out, but be borne to “pastures new.” The tick-trefoil is a disagreeable plant from its burr-like quality, but is not usually harmful as a weed. It is rather a handsome plant, especially in mass. The large purple flowers are quite showy. It flowers in the summer.



— 79 —

NIGHT FLOWERING CATCHFLY.

SILENE NOCTIFLORA.

JULY.



— 80 —

TICK TREFOIL.

MEIBOMIA (DESMODIUM) CANADENSIS.

JULY.

W. H. HATCH, Congressman, First District, Missouri, Chairman Committee of Agriculture, House of Representatives, Washington, Representative for sixteen years, Bloomington, Ill.:

"Have no doubt that the book will be valuable as a text-book, and that it will go far toward the development of a love for the beautiful."

We fully concur in the above:

B. F. FUNK, Congressman, Fourteenth District, Illinois, Graduate Wesleyan University, Ex-Mayor Bloomington.

JAS. W. MARSHALL, Congressman, Ninth District, Virginia, Graduate Roanoke College.

JNO. DAVIS, Congressman, Fifth District, Kansas, Graduate Illinois College, one of the founders of the Agricultural College, Kansas.

S. B. ALEXANDER, Congressman, Sixth District, North Carolina, Graduate University of North Carolina, Member of the Agricultural Committee of the House of Representatives, Member State Board of Agriculture.

H. M. BAKER, Congressman, Second District, New Hampshire, Graduate of Dartmouth College, Ex-State Senator, Ex-Judge Advocate-General of New Hampshire.

J. STERLING MORTON, Secretary of Agriculture of President Cleveland's Cabinet:

"I fully agree with the above, and could not do otherwise after seeing the illustrations."

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